

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A CDMA reception apparatus comprising:

propagation path variation estimation means for estimating propagation path variations ~~from different~~ between respective prior transmit power control sections ~~in the past to and a certain present~~ current transmit power control section to obtain propagation path variation estimation values, wherein each of the propagation path variation estimation values is obtained by estimating a propagation path variation between a different corresponding prior transmit power control section and the current transmit power control section;

propagation path variation correction means for generating a plurality of corrected products, each corrected product obtained by multiplying at least one of vector, amplitude and/or power of a received signal of said plurality of the different corresponding prior transmit power control section ~~sections~~ by said propagation path variation estimation value obtained by estimating the propagation path variation between the different corresponding prior transmit power control section and the current transmit power control section ~~said propagation path variation estimation means;~~ and

averaging means for averaging the plurality of corrected products ~~at least one of vector, amplitude and/or power of received signal of said plurality of transmit power control sections~~ ~~corrected by said propagation path variation correction means.~~

Claim 2. (Currently Amended) A CDMA reception apparatus comprising:

transmit power changing amount estimation means for estimating changing amounts of transmit power of a communication partner station varied by transmit power control ~~from~~ different between respective prior transmit power control sections ~~in the past to and~~ a certain ~~present~~ current transmit power control section to obtain transmit power changing amount estimation values, wherein each of the transmit power changing amount estimation values is obtained by estimating a transmit power changing amount between a different corresponding prior transmit power control section and the current transmit power control section;

transmit power changing amount correction means for generating a plurality of corrected products, each corrected product obtained by multiplying at least one of vector, amplitude and/or power of a received signal of ~~said plurality of the different corresponding prior~~ transmit power control section ~~sections~~ by said transmit power changing amount estimation value obtained by estimating the transmit power changing amount between a different corresponding prior transmit power control section and the current transmit power control section ~~said transmit power changing amount estimation means;~~ and

averaging means for averaging the plurality of corrected products ~~at least one of vector, amplitude and/or power of received signal of said plurality of transmit power control sections~~ ~~corrected by said transmit power changing amount correction means.~~

Claim 3. (Original) The CDMA reception apparatus as claimed in Claim 1 or 2, wherein said averaging means is provided with

vector addition means for performing vector addition;

division means for dividing a vector added by said vector addition means with a number of vectors added; and

means for converting vector divided by said division means into a power.

Claim 4. (Original) The CDMA reception apparatus as claimed in Claim 1 or 2, wherein said averaging means is provided with

amplitude addition means for performing amplitude addition;

division means for dividing an amplitude added by said amplitude addition means with a number of amplitudes added; and

means for converting amplitude divided by said division means into a power.

Claim 5. (Previously Presented) The CDMA reception apparatus as claimed in Claim 1 or 2, wherein said averaging means is provided with

power addition means for performing power addition; and

division means for dividing a power added by said power addition means with a number of powers added.

Claim 6. (Currently Amended) The CDMA reception apparatus as claimed in Claim 1, wherein said propagation path variation estimation means estimates a propagation path variation using a channel ~~not performing transmit power control~~ whose transmit power is not controlled.

Claim 7. (Currently Amended) The CDMA reception apparatus as claimed in Claim 2, wherein said transmit power changing amount estimation means estimates a transmit power changing amount using a transmit power control indicator transmitted from ~~own station~~ said CDMA reception apparatus.

Claim 8. (Original) The CDMA reception apparatus as claimed in Claim 1 or 2, wherein said averaging means further comprises averaging section setting means for setting an averaging section.

Claim 9. (Currently Amended) The CDMA reception apparatus as claimed in Claim 8, wherein said averaging section setting means comprises:

means for setting said averaging section ~~to a small section~~, smaller than the present averaging section when performing communication by a channel ~~of which a~~ in each transmit power control section, in which power of said channel allocated to a signal subjected to received signal power measurement ~~existing in each transmit power control section is high~~ is higher than a predetermined value; and

means for setting said averaging section ~~to a large section~~, larger than the present averaging section when performing communication by a channel ~~of which a~~ in each transmit power control section, in which power of said channel allocated to a signal subjected to received signal power measurement ~~existing in each transmit power control section is small~~ is smaller than the predetermined value.

Claim 10. (Currently Amended) The CDMA reception apparatus as claimed in Claim 8, wherein said averaging section setting means comprises:

means for setting said averaging section ~~to a large section~~, larger than the present averaging section when a partner transmit station ~~performs transmit power control, there is a channel other than channel transmitting to said reception station and transmitting a channel not performing transmit power control~~ transmits a channel whose power is controlled and another channel whose power is not controlled with the same antenna and directivity, and ~~propagation path variation estimation using said channel not performing transmit power control is possible~~ said channel whose transmit power is not controlled transmits a pilot signal; and

means for setting said averaging section ~~to a small section~~ smaller than the present averaging section when a partner transmit station ~~performs transmit power control, there is not a channel other than channel transmitting to said reception station and transmitting a channel not performing transmit power control~~ does not transmit said channel whose power is controlled and another channel whose power is not controlled with the same antenna and directivity, or ~~even when transmitting but not performing transmit power control, and propagation path variation estimation using said channel not performing transmit power control is not possible~~ said channel whose transmit power is not controlled does not transmit the pilot signal.

Claim 11. (Currently Amended) The CDMA reception apparatus as claimed in Claim 8, wherein said averaging section setting means comprises:

traveling speed detection means for detecting a relative traveling speed between a communication partner station and own station; and

means for setting said averaging section ~~to a small section~~ smaller than the present averaging section when said detected traveling speed is larger than a predetermined value, and for setting said averaging section to ~~a large section~~ larger than the present averaging section when said detected traveling speed is smaller than the predetermined value.

Claim 12. (Currently Amended) A received signal power measurement method of a CDMA reception apparatus, comprising:

a propagation path variation estimation step for estimating propagation path variations ~~from different~~ between respective prior transmit power control sections ~~in the past to and a~~ certain present current transmit power control section to obtain propagation path variation estimation values, wherein each of the propagation path variation estimation values is obtained by estimating a propagation path variation between a different corresponding prior transmit power control section and the current transmit power control section;

a propagation path variation correction step for generating a plurality of corrected products, each corrected product obtained by multiplying at least one of vector, amplitude and/or power of a received signal of said plurality of the different corresponding prior transmit power control section ~~sections~~ by said propagation path variation estimation value obtained by estimating the propagation path variation between the different corresponding prior transmit power control section and the current transmit power control section ~~said propagation path variation estimation step;~~ and

an averaging step for averaging the plurality of corrected products ~~at least one of vector, amplitude and/or power of received signal of said plurality of transmit power control sections corrected by said propagation path variation correction step.~~

Claim 13. (Currently Amended) A received signal power measurement method of a CDMA reception apparatus, comprising:

a transmit power changing amount estimation step for estimating changing amounts of transmit power of a communication partner station varied by transmit power control ~~from~~ different between respective transmit power control sections ~~in the past to and~~ a certain present current transmit power control section to obtain transmit power changing amount estimation values, wherein each of the transmit power changing amount estimation values is obtained by estimating a transmit power changing amount between a different corresponding prior transmit power control section and the current transmit power control section;

a transmit power changing amount correction step for generating a plurality of corrected products, each corrected product obtained by multiplying at least one of vector, amplitude and/or power of a received signal of said plurality of the different corresponding prior transmit power control section sections by said transmit power changing amount estimation value obtained by estimating the transmit power changing amount between a different corresponding prior transmit power control section and the current transmit power control section ~~said transmit power changing amount estimation step;~~ and

an averaging step for averaging the plurality of corrected products ~~at least one of vector, amplitude and/or power of received signal of said plurality of transmit power control sections corrected by said transmit power changing amount correction step.~~

Claim 14. (Original) The received signal power measurement method as claimed in Claim 12 or 13, wherein said averaging step is provided with

a vector addition step for performing vector addition;

a division step for dividing a vector added by said vector addition step with a number of vectors added; and

a means for converting vector divided by said division step into a power.

Claim 15. (Original) The received signal power measurement method as claimed in Claim 12 or 13, wherein said averaging step is provided with

a amplitude addition step for performing amplitude addition;

a division step for dividing an amplitude added by said amplitude addition step with a number of amplitudes added; and

a step for converting amplitude divided by said division step into a power.

Claim 16. (Previously Presented) The received signal power measurement method as claimed in Claim 12 or 13, wherein said averaging step is provided with

a step for performing power addition; and

a division step for dividing a power added by said power addition step with a number of powers added.

Claim 17. (Currently Amended) The received signal power measurement method as claimed in Claim 12, wherein said propagation path variation estimation step estimates a propagation path variation using a channel ~~not performing transmit power control~~ whose transmit power is not controlled.

Claim 18. (Currently Amended) The received signal power measurement method as claimed in Claim 13, wherein said transmit power changing amount estimation step estimates a transmit power changing amount using a transmit power control indicator transmitted from ~~own~~ station said CDMA reception apparatus.

Claim 19. (Original) The received signal power measurement method as claimed in Claim 12 or 13, wherein said averaging step further comprises an averaging section setting step for setting an averaging section.

Claim 20. (Currently Amended) The received signal power measurement method as claimed in Claim 19, wherein said averaging section setting step comprises:

a step for setting said averaging section ~~to a small section,~~ smaller than the present averaging section when performing communication by a channel ~~of which a~~ in each transmit power control section, in which power of said channel allocated to a signal subjected to received signal power measurement ~~existing in each transmit power control section is high~~ is higher than a predetermined value; and

a step for setting said averaging section ~~to a large section,~~ larger than the present averaging section when performing communication by a channel ~~of which a~~ in each transmit power control section, in which power of said channel allocated to a signal subjected to received signal power measurement ~~existing in each transmit power control section is small~~ is smaller than the predetermined value.

Claim 21. (Currently Amended) The received signal power measurement method as claimed in Claim 19, wherein said averaging section setting step comprises:

a step for setting said averaging section ~~to a large section,~~ larger than the present averaging section when a partner transmit station ~~performs transmit power control, there is a channel other than channel transmitting to said received station and transmitting a channel not performing transmit power control~~ transmits a channel whose power is controlled and another channel whose power is not controlled with the same antenna and directivity, and ~~propagation path variation estimation using said channel not performing transmit power control is possible~~ said channel whose transmit power is not controlled transmits a pilot signal; and

a step for setting said averaging section ~~to a small section,~~ smaller than the present averaging section when a partner transmit station ~~performs transmit power control, there is not a channel other than channel transmitting to said received station and transmitting a channel not performing transmit power control~~ does not transmit said channel whose power is controlled and another channel whose power is not controlled with the same antenna and directivity, ~~or even when transmitting but not performing transmit power control, and propagation path variation estimation using said channel not performing transmit power control is not possible~~ said channel whose transmit power is not controlled does not transmit the pilot signal.

Claim 22. (Currently Amended) The received signal power measurement method as claimed in Claim 19, wherein said averaging section setting step comprises:

a step for detecting a relative traveling speed between a communication partner station and own station; and

a step for setting said averaging section ~~to a small section~~ smaller than the present averaging section when said detected traveling speed is larger than a predetermined value, and for setting said averaging section ~~to a large section~~ larger than the present averaging section when said detected traveling speed is smaller than the predetermined value.